AMENDMENTS TO THE CLAIMS:

- 1-15. (Cancelled)
- 16. (Currently Amended) A catalyst for polymerization of conjugated diene, comprising: (A) an yttrium compound; (B) an ionic compound including a non-coordinate anion and a cation; and (C) an organometallic compound including an element selected from the groups 2, 12 and 13 of the periodic table.

the yttrium compound being one of an yttrium compound having a bulky ligand in the following general formula, an yttrium alkoxide, and an yttrium compound comprising a carboxylate:

[Chemical Formula 1]

$$R_2$$
 R_3
 R_1
 R_2
 Y

where R₁, R₂, R₃ denote hydrogen or a substituent having 1-12 carbon atoms; O denotes an oxygen atom; and Y denotes an yttrium atom.

17-18. (Cancelled)

19. (Previously Presented) The catalyst for polymerization of conjugated diene according to claim 16, wherein the conjugated diene polymers include a cis-1,4-polybutadiene having 90 % or more of a cis-1,4 structure.

20-23. (Cancelled)